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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/905,524 | 07/13/2001 | Hawley K. Rising III | 080398.P426 | 3479 |
| 8791 | 7590 | 06/07/2006 | EXAMINER | |
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| | | | ART UNIT | PAPER NUMBER |
| | | | 2162 | |

DATE MAILED: 06/07/2006

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/905,524

Filing Date: July 13, 2001

Appellant(s): RISING, HAWLEY K.

Sheryl Sue Holloway
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed March 13, 2006 appealing from the Office action mailed September 9, 2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,223,183 SMITH ET AL.

SMITH ET AL.

04-2001

Applicant's Admitted Prior Art (APA)

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1 – 22 are rejected under 35 U.S.C. 103(a). This rejection is set forth in prior Office Action, Paper Number 09052005.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 – 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant’s Admitted Prior Art (hereinafter “APA”) and in view of U.S. Patent Number 6,233,183 issued to John Smith et al. (hereinafter “Smith”).

With respect to claims 1, 11 and 22, APA teaches a method for processing descriptions of audiovisual content, the method comprising: evaluating a description of audiovisual content (APA: page 2, lines 3 – 9); determining whether the description is an abstraction (APA: page 2, lines 12 – 16); and if the description is an abstraction,

determining a level of abstraction, wherein the level of abstraction identifies one of plurality of types of abstraction (APA: page 2, lines 12 – 22).

APA does not explicitly teach storing an indicator of the level of abstraction with the description of audiovisual content as claimed.

However, Smith discloses claimed storing an indicator of the level of abstraction (Smith: column 4, line 63 – column 5, line 12).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was to combine Smith with APA to provide a uniform description scheme and to provide an abstraction layer between image, video and audio description schemes and multimedia applications and the stored, compressed data, which then allows the data to be referenced and accessed in terms of space and frequency views (see Smith: column 3, lines 3 – 8).

As to claim 2, the description of audiovisual content is a semantic description (page 2, lines 3 – 9).

As to claim 3, utilizing the indicator of the level of abstraction to determine a usage mode of the description of audiovisual content (Smith: column 1, lines 17 – 36).

As to claim 4, the usage mode is any one of a descriptive mode or an accessing mode (APA: page 1, lines 15 – 17 and Smith: column 1, lines 39 – 48).

As to claim 5, utilizing the indicator of the level of abstraction to determine whether the description of audiovisual content is a media abstraction (APA: page 2, lines 3 – 16).

As to claim 6, utilizing the indicator of the level of abstraction to determine whether the description of audiovisual content is a lambda abstraction (APA: page 2, lines 3 – 20).

As to claim 7, the indicator of the level of abstraction includes a positive integer to store a number associated with the level of abstraction (APA: page 2, lines 3 – 20).

As to claim 8, the indicator further includes a term to point to one of a plurality of entries in a classification scheme, the one of the plurality of entries being defined by the abstraction (APA: page 2, lines 3 – 20).

As to claim 9, the description of the audiovisual content is a description scheme (APA: page 2, lines 3 – 20).

With respect to claim 10, APA does not explicitly teach searching a database of descriptions using a level of abstraction specified by a user as claimed. Smith teaches claimed searching a database of descriptions using a level of abstraction specified by a user. Smith teaches steps of standardizing the interface for multimedia content search and filtering in a large number of multimedia storage (see Smith: column 1, lines 43 – 54).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to combine Smith with APA to improve the ability by which audio-visual content is indexed, searched, browsed, filed and filtered in a large number of multimedia storage and retrieval applications and to enable interoperability between image and video systems.

The subject matter of claims 12 – 21 are rejected in the analysis above in claims 1 – 10 and these claims are rejected on that basis.

(10) Response to Argument

Appellant's arguments regarding the rejection of claims 1 – 22:

Argument No. 1: “ . . . the examiner's interpretation of the Admitted Prior Art as disclosing elements of claim 1 is incorrect. That is the Examiner misinterpreted Applicant's Background section by asserting the APA discloses determining the abstraction level . . . ” (Page 3, The Seventh Paragraph, Brief).

Argument No. 2: “ . . . the background section do not teach or suggest that abstraction levels could be determined electronically or that types of abstractions could be identified electronically . . . ” (Page 3, The Fifth Paragraph, Brief).

Argument No. 3: “Smith discloses only one abstraction level, the space and frequency view, and thus does not need to store an indicator of the abstraction level . . . ” (Page 4, The First Paragraph, Brief).

Argument No. 4: “ . . . the combination does not teach or suggest each and every limitation of Appellant's invention . . . ” (Page 4, The Second Paragraph, Brief).

Argument No. 5: “ . . . the examiner has failed to establish a prima facie case of obviousness . . . ” (Page 4, The Third Paragraph, Brief).

Examiner's Response to Arguments:

In response to Argument No. 1:

The Appellant argues that the Examiner misinterpreted Applicant's Background section by asserting the APA discloses determining the abstraction level.

APA teaches an abstraction can be used as a template for creating descriptions of specific audiovisual items or lower level abstractions. Combined teachings of APA and Smith teach audio-visual abstraction types as claimed. Examiner concludes that using of an abstraction and creating a level of abstraction in APA clearly teaches determination of a level of abstraction as claimed.

In response to Argument No. 2:

The Appellant argues that the background sections do not teach or suggest that abstraction levels could be determined electronically or that types of abstractions could be identified electronically.

The Examiner respectfully submitted that APA teaches semantic descriptions describe the audiovisual content from the viewpoints of its conceptual notions and that semantic descriptions describe entities that are concrete. A concrete entity can have an instance in the real world or the media. Also, various levels of abstraction may be applied to a physical entity when creating a description. For example, a description may be created as a media abstraction. Furthermore, a formal abstraction is created from a

description of a concrete entity by generalizing one or more elements of the entity, i.e., by substituting one or more elements of the entity by a variable. A description may also be created as an abstraction of a higher degree (page 2, lines 10 – 18).

In response to Argument No. 3:

The Appellant argues that Smith discloses only one abstraction level, the space and frequency view, and thus does not need to store an indicator of the abstraction level.

Smith's teachings of the space and frequency view description system and method provides a standard way to describe locations, sizes, views, tiling and hierarchical decompositions in space, time, resolution and frequency. The space and frequency view description system and method also provide an abstraction layer between the multimedia applications that need multi-resolution sub-region access to lattice data and/or data which is capable of being characterized as lattice data, including image, video and audio data and the storage and compression formats for the data (hereinafter collectively referred to as "lattice data"). The Smith's invention thereby eliminates the need for the multimedia applications and the other specific MPEG-7 description schemes (DSs) to be concerned with the underlying data representations and storage formats. Accordingly, a higher-level interface is provided in which the applications use the space and frequency view description scheme as a standard way of referring to space and frequency views. The space and frequency view description

system and method correlate those views with the specific storage and compression schemes. One organization of space and frequency views which is often used in multimedia applications is based on a multi-resolution pyramid. A multi-resolution pyramid contains several versions of the data at different resolutions. This type of pyramid is used in the JPEG storage format for storing images at multiple resolutions, where each of the levels of the pyramid contains a tiling with a space and frequency view and only the bottom tiling, at full-resolution, is complete. Under the Smith's invention, an SFPyramid is defined as a hierarchy of SFViews with one SFView at each level, in which there is a processing dependency among the SFViews in the hierarchy. The SFPyramid can describe any arbitrary multi-resolution decomposition of any number of levels of the image or video data, including the case of the JPEG pyramid.

Therefore, it is concluded that Smith teaches an abstraction layer between the multimedia applications. Smith further teaches a multi-resolution pyramid that contains several versions of the data at different resolutions. This type of pyramid is used in the JPEG storage format for storing images at multiple resolutions, where each of the levels of the pyramid contains a tiling with a space and frequency view and only the bottom tiling, at full-resolution and an SFPyramid is defined as a hierarchy of SFViews with one SFView at each level of abstraction.

In response to Argument No. 4:

The Appellant argues that the combination does not teach or suggest each and every limitation of Appellant's invention.

In response to applicant's argument that the combination does not teach or suggest each and every limitation of Appellant's invention, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious to a person of ordinary skill in the art at the time of the invention was to combine Smith with APA to provide a uniform description scheme and to provide an abstraction layer between image, video and audio description schemes and multimedia applications and the stored, compressed data, which then allows the data to be referenced and accessed in terms of space and frequency views (see Smith: column 3, lines 3 – 8).

In response to Argument No. 5:

The Appellant argues that the examiner has failed to establish a *prima facie* case of obviousness.

In response to applicant's argument, a *prima facie* case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art. Once such a case is established, it is incumbent upon appellant to go forward with objective evidence of unobviousness. In re Fielder, 471 F.2d 640, 176 USPQ 300 (CCPA 1973).

Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the specification.

Interpretation of Claims-Broadest Reasonable Interpretation

During patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.' Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,


Shahid Alam

Primary Examiner, AU 2162

May 29, 2006

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